

Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

three stars. They appear to be of great intrinsic brilliancy. If of the solar mean density, the stars AB must shine with nine times the solar lustre. This is, indeed, only what we should expect from the quality of their light; but it is a matter for surprise that all the stars yet known to be attended by obscure satellites show Sirian spectra, and stand accordingly themselves at the very summit of luminous intensity.

NOTICES FROM THE LICK OBSERVATORY.

PREPARED BY MEMBERS OF THE STAFF.

Sketch of the Life of Professor Elias Loomis—Born 1811; Died 1889—[By Professor H. A. Newton].

Professor Newton, of Yale College, has published, in an octavo pamphlet of forty-four pages (with a lifelike portrait on steel), a sketch of the life of Professor Loomis, who was his colleague and friend for many years.* Professor Loomis' life nearly covers the period of the rise of American science, and his solid contributions to many branches of thought are set forth in a most fitting and sympathetic light. The subjects of Terrestrial Magnetism, of Astronomy, of Meteorology, engaged his serious labors for a period of more than fifty years. A list of 164 separate memoirs from his hand is given. Of one of these, Professor Newton-a conscientious judge-says that its method is at the foundation of "the new meteorology," and that this paper must be regarded as "the most important in the history of that science." Many of his other works are of capital importance also. At his death he bequeathed the sum of \$300,000 from his private fortune to the Observatory of Yale College as an endowment fund, thus assuring the future of an institution for which he had already done much. Professor Loomis was one of the group of men who were the founders of American science, and his high claims to the gratitude and respect of his countrymen are established by his biographer. His name is most generally known through the admirable series of text-books which he printed from time to time, and which brought him a large fortune. His chief interest was always "in abstract science without any regard to its practical applications," and his life is one long record of a steady following of

^{*} This memoir has lately been reprinted in the Sidereal Messenger for June, 1890.

his own ideals. Yale College has reason to be proud of its distinguished company of astronomers, of which Loomis was so prominent a member. The Lick Observatory, and every observatory in America, owes more to their efforts and influence than is easily expressed.

E. S. H.

THE ROTATION OF THE SUN, [BY PROFESSOR N. C. DUNÉR, DIRECTOR OF THE OBSERVATORY OF UPSALA].

From a note in the Astronomische Nachrichten, No. 2968, the following very brief summary is made:

During the years 1887-8-9 Professor Dunér studied the laws of the rotation of the surface of the sun at different latitudes, by means of a spectroscope and a Rowland grating. The method employed was to compare the spectra of the two borders of the sun. One of these borders is moving towards the earth, the other is moving away from it. Hence the spectral lines of the former are shifted towards the violet end of the spectrum, while the lines of the latter are shifted towards the red end.

Measures of the amount of the displacement give a means of calculating the velocity of the motion towards or from the earth, expressed in miles, and this velocity is, of course, a measure of the angular rotation of the surface of the sun at the particular latitude in question. The measures of Professor Dunér were extremely precise, and the following results must be very near the truth. I have added the third column, where his results are expressed in a familiar unit:

Heliocentric Latitude.	Angle through which the sun's surface turns in 24 hours.	Period in Days.
· · · · · · · · · · · · · · · · · · ·	° 14.14	27.5
0.4	14.14	² 5.5
15.0	13.66	26.4
30.0	13.06	27.6
45.0	11.99	30.0
60.0	10.62	33.9
74.8	9.34	38.6
	1	

Professor Dunér says that the values in the second column "confirm what has already been revealed by observations on the